

## AUTOMATIC PHASE AND FREQUENCY ADJUSTMENT CIRCUIT AND METHOD

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### ABSTRACT

The invention is a circuit and method for automatically adjusting the phase and frequency of a pixel clock derived from analog image data. The circuit includes a phase locked loop circuit adapted to generate a phase locked loop clock responsive to a reference signal and an edge detector circuit adapted to generate an edge pulse signal corresponding to a transition of an analog data signal. A phase detector circuit is adapted to identify a phase of the phase locked loop clock associated to the transition of the analog data and thereby generate a phase adjust signal. A phase adjust circuit is adapted to generate a pixel clock by adjusting the phase of the phase locked loop clock responsive to the phase adjust signal.

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